DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018884

Address: 333 Burma Road **Date Inspected:** 17-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Gang Wei No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

> 34-0006 **Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

Bridge No:

MAGNETIC PARTICLE TESTING

ZPMC NWIT No: 7393

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 15% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (MT) report on this date. The members are identified as corner assembly. The weld designations are as follows:

VP3004-001-026, 027, 024, 022, 019, 018, 014, 006, 013, 005, 002, 010

This QA Inspector randomly observed the following work in progress.

BAY #14

OBG 13 EAST



WELDING INSPECTION REPORT

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This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201087 performing the Shielded Metal Arc Welding process on weld 010 located at PCMK SEG3009C. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048047 performing the Shielded Metal Arc Welding process on weld 142 located at PCMK SEG3007Q. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 069866 performing the Flux Cored Arc Welding process on weld 071 located at PCMK SEG300AU. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-P4-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067037 performing the Flux Cored Arc Welding process on weld 086 located at PCMK SEG3009H. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-Tc-P4-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 058102 performing the Shielded Metal Arc Welding process on weld 015 located at PCMK SEG3007E. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-Tc-u4b-fcm.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 062782 performing the Flux Cored Arc Welding process on weld 034 located at PCMK SEG3009H. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2233-Tc-u4b-f.

During the random visual inspection of OBG segment 13AE this QA Inspector observed cope holes at the weld joints between floor beam (FB3106) stiffeners to the longitudinal diaphragm (LD3015) was welded. This QA Inspector informed to ZPMC QC and ABF QA Inspector. For more detail see attached photos. This QA Inspector observed fit-up was in progress for the floor beam FB3107, FB3114 and FB3124.

OBG 14 EAST

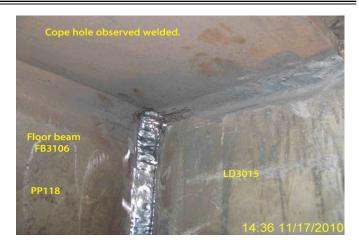
This Quality Assurance (QA) Inspector observed ZPMC personnel performed ultrasonic testing for the weld between longitudinal diaphragm (LD3042) and bottom panel. Weld number identified as SEG3019AB-091~96. This QA Inspector observed ZPMC personnel marked 12 rejectable indications in this weld SEG3019AB-091, six rejectable indications in the weld SEG3019AB-092, five rejectable indications in the weld SEG3019AB-093, three rejectable indications in the weld SEG3019AB-094, eight rejectable indication in the weld SEG3019AB-095 and two rejectable indications in the weld SEG3019AB-096.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer